317 Salt.- Rock salt (uya·l) obtained in winter
135 chiefly, from dry salt lake to E in Koso terri-
431 tory between Randsburg and Cantil on n. edge of
[415] Mohave desert. Individual men went for it, afoot;
487 "a man started out at 2-3 o'clock in the morning, taking water with him in a basketry water bottle. He returned home the same evening or the next day, bringing back 1/2 sackful of salt, enough for about one month, on each trip" (SM). Route followed led S from Weldon to Kelso valley in Kawaiisu territory, thence SE to Jawbone canyon and Mohave desert and NE to Dry Salt lake. Another route from Onyx led over Walker pass, S across Indian Wells valley to Dove springs and through Red Rock canyon to Cantil. Either route
[482] about 40 mi. long. Salt transported in large lumps, in deerskin sacks; when used pounded in mortars or pulverized on slab; used sparingly on cooked meat and for drying meat and fish, but not to season acorn, piñon mush, or any other
262 plant foods. Salt per se not specifically tabooed
784 at certain times (SM, FP), as among Diegueño, Mohave (Kroeber, Handbook, 721, 747, 748, 750); food taboos related specifically to meat (including fish), grease, and cold water. However, as it was only with meat and fish that salt was used, practical result was that observers of meat taboo also abstained from salt during taboo periods.

251 Storage and preservation of food.- Acorns
343 stored in granary (la·lwašti·l) of Miwok type (Kroeber, Handbook, 446, pl. 38) but lacking center post and with framework consisting of 4 large posts, 6 ft. high, set upright in ground 3 ft. apart to form square. Bottom of granary cleared ground by 2-4 in. Granary lined with sagebrush; after acorns dumped in, layer of brush piled over them and bark slabs put over brush to keep out rain. Granaries built at acorn grounds used from yr. to yr.; during winter man and wife made trips to their granary and drew upon contents as needed. Smaller granaries of same type sometimes set up near dwelling house to use for acorns gathered nearer home.

Piñon cache (pača·i·ništ) consisted of circular pit, about 5 ft. in diameter, 2 1/2 ft. deep, dug with sticks in floors of natural rock shelters near piñon grounds. Pits lined with flat rocks (SM) or brush (FP); loose piñons dumped into cavity, cache covered with large flat rocks or grass and small stones. During winter men made trips to caches, packing home piñons in skin sacks.

Families generally had storage house near family dwelling; this storage house as large and made in same fashion as living house, save that
[415] it lacked fire pit and smoke hole and walls were thatch and mud covered. In this house were kept large wide-mouthed coiled baskets, some "as big as washtubs" and trays used as receptacles for stores of dried meat, fish, small seeds, piñons, acorns, as well as articles of domestic or occa-

515 Both men, women took sweat baths, women usually sweat bathing at night, before the men, "every day" (PN), "once in awhile" (SM), "whenever they wanted to" (FP). After bathing women jumped in cold water, "the same as men" (FP). [841] Men, women did not bathe together, nor did woman enter sweat house during menstrual period. Boys had to be "over 14" (PN), "about 16" (SM), to be able to stand sweat bathing; girls "about 14." There was no ceremonial significance attached to boy's or girl's first sweat bath and from early childhood children allowed to romp around inside sudatory at will when it was not in use. Adults used sweat house almost daily; sweat bathing caused one to feel "light" and "good" (FP, SM). Men and women were wont to sing when taking sweat baths which lasted, for men at least, as long as 3 hours; men took such baths in evening, sometimes after breakfast as well. While they [276] sweated, men, women smoked sparingly or chewed [342] tobacco mixed with lime. Sometimes single men, widowers, or very old men used sweat house as sleeping quarters (SM); this denied by FP. Married men always slept with their wives, however [534 171] (above). Hand games never played in sweat house, although informants aware Owens Valley Paiute utilized their sweat houses for this; PN said [535] dances sometimes held in sudatory, but all other informants denied this; possibly PN's statement reflects Palagewan custom, as opposed to that of [276] Tübatulabal. Jimsonweed administered to small groups in sweat house (p. 5). Sudatories no [177] longer used by Tübatulabal and ruins of only one such known to me (pl. 6a); this was on Bloomfield ranch near small flat on W side of South Fork r., close to village site no. 4 (fig. 11). Entrance to this house faced E.

349 Ceremonial brush enclosure.- For dances, round 527 brush enclosure (ho·yat, also used for brush en- 535 closure at piñon grounds), with walls of willow and brush 5-6 ft. high and single entrance on NE side, built; this similar to piñon-camp enclosure (above). Visitors from different localities who were attending dance were assigned places to camp within wall of enclosure; fire built in center and dancing done around this fire (see fig. 15, p. 69). Such enclosures made by adolescent boys at order of dance manager, and appear to have been used more by Tübatulabal than Palagewan, latter using flat-topped shade with sides (above) for camping purposes during fiestas. Covered dance house did not occur.

MEANS OF TRANSPORT

481 All traveling accomplished on foot; burdens 482 of all varieties, from firewood to babies, packed 492 on back; dogs not used for transport. Streams 501 crossed by swimming; rafts known, but used only for fishing.

352 deer sinew (tohi·lĪŋ tapn); all bars except bot-
854 tom one bound on underside of frame. Second specimen (1-28571) measures 43 in. overall, 35 in. from crotch to top; has 10 crossbars, nailed to frame as above; both specimens made and used by SWN. Both these cradles lack hood (ku·man); formerly tule hood, narrow at sides where it was fastened to cradle near top, and wider across central section, wo"ld have been attached to such cradle (SM, FP); strings of beads, which served to amuse child, depended from hood. Child
[482] lay on tule mat, wrapped in wildcatskin, tied down with native twine. Woman packed cradle on back, using pack strap; when she arrived at destination she leaned cradle up against tree or boulder, in shade, planting sharpened end of forked-stick frame in ground.

301 Sex of child occupying cradle not indicated.
352 by any sort of decoration on either type of
562 cradle (all informants); repeated questioning on this point always brought negative response.

501 Rafts and ferriage; horses.- Large green
226 tules (ši'i·bĪ·l), Scirpus acutus Muhl., from 6-8 ft. long, were tied with native twine into bundles of 4; these bundles were laid side by side and lashed together with native rope to make raft (ni·ht) 6-8 ft. long, 6 ft. wide (SM). This raft was square at both ends and not built
[221] up on sides; could carry 2 men and was used for spearing large fish on smooth stretches of Kern r. or on former lakes in South Fork valley, during winter only. Such raft serviceable only so long as tules remained wet; when tules dried out, raft became leaky, was discarded. Single individualr made such, but any man might use raft; when not in use, rafts kept drawn up on river bank.

Willow pole 6-7 ft. long, 2-3 in. in diameter, pointed at one end, used to propel raft. Man doing poling either stood or sat, shifting pole from one hand to other, while second man speared fish.

501 Kroeber mentions "balsas of bundled tules,
with a keel, a slender prow, and a square stern,
●481 (which) were made" by Tübatulabal (Handbook, 608); this information evidently based on Powers' statement (Powers, 393), obtained from widely-traveled Tübatulabal named Chico at Tule River reservation (Powers, 394). None of my informants knew anything about craft such as Powers describes. Garcés "supplicated [the Indians] that they should make a raft" to take him across unaugmented Kern, "and they answered me that they knew not [how to do so]. They conveyed me across between four of them by swimming, two taking me by the arms, and the other two by the body" (Garcés, 281). Garcés' statements accord with FP's assertion that goods or young children were ferried across large streams on men's backs, and
[221] SM's that men, women, children were all good swimmers, and that tule rafts were used only in winter, for very specialized purpose. Pots, large

501
481 baskets not used for ferrying; breast stroke used chiefly in swimming (SM).
231 Horses mounted on right side; bridles made of
492 native twine, saddles of tules.

WEAPONS

411 Bow chief weapon; spears may have been used in warfare; clubs not used, "because men didn't get that near to each other when they fought" (SM); spear thrower, shield, armor not used; aboriginal use of slings denied.

Bow.- Both for war and hunting large game, used sinew-backed bow (a·lit tupani·l), made from juniper (wa·dul), Juniperus californica Carr., var. utahensis Engelm., foothill floral area; bows also occasionally made from tamarack (išwa'adul). Such bows were "hard to make," and "took a long time to shape" with flint knives; furthermore one could not "get a good piece of wood for a bow every day" (SM, ES). Method of manufacture was to select suitable piece of wood, cut it, peel bark off immediately and shave bow into shape with knife, then warm bow in hot ashes or hold it over fire and flatten 2 ends over knee. Next, cord tied taut from one end to other, over back of bow, thus bowing length of wood in arc opposite to that in which it would bow when used. Tied thus, bow left to season for 6-8 days; was then untied and 2 1/2-in.-wide strip of water-wetted sinew (tupani·l), from backbone of deer, glued on to back of bow and overlapping edges glued down on sides. At 2 ends of bow, ends of sinew backing wrapped around wood several times to form knobs which prevented bowstring from slipping; neither end of bow notched for stringing. After sinew had dried, bow wrapped at grip (po·ho·nil) with strip of buckskin. Bowstring (piho·lit) of sinew, 3-ply, rolled into cord on knee (SM). Sinew-backed bows were some 48 in. long, 2 in. wide, 1/2-3/4 in. thick at grip; back and under side flattened, edges rounded; ends about 1 in. wide, 1/4 in. thick and either slightly re-bowed, or straight.

For hunting small game plain bow (a·lit) with rounded edges, made either of willow or juniper, used. Bowstring for such made from native twine. SM said such bows were about 45 in. long, 2 in. wide at grip; specimen 1-19808, of willow, is 50 in. long. In 1932, FC had willow bow he had made, which MM said was similar to bows TÜbatulabal used formerly for shooting rabbits; FC had made his from green willow, first shaping it with knife, then bowing it in at grip by laying length of willow on 2 flat rocks which were set some 16 in. apart, so when weight was put on top of central section of willow it bowed downward between the 2 rocks. Ends were rebowed by placing flat rocks beneath and on top of each tip and suspending rock from underneath unfinished bow at points 8 in. inward from ends. Thus weighted, bow was left to dry and season for 8 days. Length of this

846 deer (SM). While on trench mother used scratching stick (o-wati-š), made from any piece of twig, so hair would not fall out; did not touch face with hands, else she would have pimples. Short time after birth girl babies' ears pierced for ear-
[304] rings, "because they don't feel it much then" (SM).

Father did not eat meat or salt until child's navel healed, else cord would rot; optional whether he hunted or fished (SM); many did not, for 2 weeks (MM, FP). Could, however, drink cold water. Did not sleep with wife for 2-4 months after child born.

853 Child was generally nursed whenever it cried; "some mothers slapped their babies when they cried all night, others nursed them" (MM). Nursing continued until child at least 2 yrs. old; LT's child
[862] of 4 frequently nursed, standing beside LT when
[841] latter seated. If mother became pregnant while child still nursing, latter weaned. Menstrual periods for woman usually recommenced about yr. after childbirth (FP).

854 Up to time when they could walk well, children
● 481 carried about in cradles (see section on Means of Transport).

842 Childless women took herb medicine to have children; FP's husband's stepfather, a Tejon Yokuts, prepared such for FP (see Autobiography
[845 of FP). Children born dead buried immediately;
754] parents not subject to meat taboo if this occurred; "not many babies died, unless a witch wanted to give their parents hard luck" (SM).

847 Abortion, infanticide.- Leaves of a "big tree"
824 (sp. ?) boiled and tea drunk by woman when she first knew she was pregnant if she wished to induce abortion; also women took medicine to prevent conception. Newborn infants "sometimes killed; one woman had a baby and killed it; she went off somewhere with her mother, so no one would know. They just buried the baby any place, like a dog; I don't see how they could do that. That woman was a witch" (FP).

845 Twins.- If person laughed about woman having twins (cono'), that person would also have twins. Twins treated well; if one treated badly, died, other would die too and give family bad luck, hence twins often accorded more consideration than other children. If mother of twins over-
[597] worked, unable to nurse both babies, relative might adopt one of them; ES, herself childless, had thus adopted her brother's son, one of pair of twins.

597 Orphans, illegitimate children.- Orphans, or
768 one of several children with one parent dead, other remarried, adopted by blood relatives. Observations (1930-1932) of 3 adopted children showed 2 treated indulgently, one as a menial.

848 Illegitimate child kept by mother, who lived with her family; father of child expected to bring meat to mother occasionally; if mother

159 out some place and the old woman took a spine
304 from a bush that grows all over up there and made the marks on me. My mother didn't know about it until afterward, because she wasn't there. At first I ran away from the old woman; I didn't want her to do it, but she said those marks would look pretty on me. Then I said, "All right," and she made them. It hurt a lot. And then she rubbed in charcoal made from the wood of some sort of a bush. I tried to rub the marks off; I grabbed dirt and rubbed it all over my face and arm, but the marks wouldn't come off. They used to show on my face for a long time, when I was younger. Indians used to do that to make themselves look pretty. PN and Petra Miranda have those marks on their faces, too.

159 Two of my brothers died while we were at u·u·-
754 pu·lap. The bad doctor, Old Bill Chico, killed
682 them. He said when he got drunk one time that he was going to kill all the children, so later they burned him over at Kernville; they tied him with a hair rope and threw him into the fire.

159 When my brothers died my parents made a fiesta
764 to have their faces washed; my mother cut off her
765 hair down to her shoulders, too, when they died.

We lived at omomĭp for awhile after that. Then some men went over on the desert and saw lots of
159 ku·l (p. 15) over there, so lots of people from here went to get it. That was when I was a young girl, about 16. I went over on the desert with my grandma (mother's mother), to a place this side of Randsburg, on a hill. A lot of people
[481] went. There were 4 camps of people over there. We all went afoot, men and women. One little girl went with her grandma; the little girl was maybe 9 or 10 yrs. old. There weren't any babies taken; the women couldn't carry them. It was in the early summer, maybe in June. We took flour from omomĭp; Bill Scodie had a store near omomĭp where he sold flour and coffee and sugar and whiskey. But we ate all that flour up when we got over on the desert, so then we just had ku·l seeds and Mariposa lily bulbs and chia seeds to eat; we ate all those. There were lots of box-thorn berries over there, too; we gathered those. And lots of Mariposa lily bulbs, big ones that we peeled a little and then boiled. We'd get half
[824] a sackful. The Mariposa lily bulbs over here are little and sweet, but those over on the desert are big.

159 That little girl who went over there used to
252 grind ku·l seeds on a grinding slab. She was little, and everybody stood around watching her, all the people; she cried then, because she was ashamed, I guess. Her grandma told her it was all right, and not to cry.

159 We ate rabbits and ku·l and chia seeds. There
[262] was nice water there, cold. We made a shade from
349 greasewood brush; not a ramada, but a shade with a single pole sticking up out of the ground and another pole leaning against the first one in the fork at the top; then we piled greasewood on both sides against that slanting pole (as in Gifford, 1932 b, pl. 2), [p. 73(6)] 1 [ie., Montzelin Albicaulis Dougl.--Analyst]

159 Gifford, 1932 b, pl. 3b). There were 4 camps over
349 there that time, each a little distant from the other. We used to work early, before sunup,
223 grinding that ku·l. One man killed doves, lots of them, at a spring. He made a little brush house and sat inside that house; when the doves came to get a drink at the spring they couldn't see him inside the house and he shot them with bow and arrow. In the evening he would bring half a sackful to camp; those doves were good and fat. He'd give 5, maybe 6, to all the people camping there.

159 I got tired of camping over there; we had no
481 white flour to eat. Another girl, younger than I was, and I started home afoot. We just came alone; there was no one else with us. We traveled all night on that desert; it was moonlight. There are lots of doglike animals on the desert, lots of yu·mu·gi·wal but we didn't see any; maybe they would eat you up.

159 We packed water in a pitched water jar, and we took along a little lunch of ku·l meal. When we got to Coyote Hole where there is a spring, we wanted to drink that water there. So we stopped at the spring. Then we saw a camp on a hill above the spring a little way off; we ran the other way, up into the hills, when we saw
[171] that camp. We were afraid that the people at the spring were Frenchmen and that they would kill us. The people in the camp were all asleep; they didn't see us. There were Frenchmen up here then, lots of them; they chase women, right away when they see them. We were afraid of Frenchmen.

When we arrived at the other side of the summit (Walker pass) we got water at a spring a little way down; then we ate our lunch and rested a little, because we were tired. It was sunup when we got to the summit. Then we came down to Canebrake from the summit. By Canebrake we saw
[177] 2 men coming up the canyon, but we were afraid and ran over on a little hill where we watched them. They were trappers, I think; white men.

We got to u·u·pu·lap; there were some people living there. We were going home to omomïp from there, but they told us my mother had left omomïp to gather chia seeds and that nobody was home. The people at u·u·pu·lap said everybody from omomïp was over at Scodie's mt., so that same day we went over there. We were very tired, but we couldn't stay over at omomïp all alone, with nobody in the house. We found my mother all right.

My grandmother came back from over on the desert a week after we got back. That girl who came home with me that time is still living; she lives over at Paiute all by herself; her husband is dead; she lives in a house near a white lady. She looks young yet; the Indians never used to get old-looking for a long time in the old days;
[262] these young people do now though because they eat everything hot, with too much salt. Indians used to eat salt too, but only a little bit.

I was growing up then. When wišimlït (SM's

[p. 74(a)]